

Air Quality Permitting Statement of Basis

September 30, 2004

Tier I Operating Permit No. T1-040313

J. R. Simplot Co., Pocatello

Facility ID No. 077-00006

Prepared by:

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DRAFT FOR PUBLIC COMMENT

Acronyms, Units, and Chemical Nomenclatures

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region

CO carbon monoxide

DEQ Department of Environmental Quality
EPA U.S. Environmental Protection Agency

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance

with the Idaho Administrative Procedures Act

NO_X nitrogen oxides PM particulate matter

 PM_{10} particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

PSD Prevention of Significant Deterioration

Rules Rules for the Control of Air Pollution in Idaho

SIC Standard Industrial Classification
Simplot J. R. Simplot Company, Don Plant

SO₂ sulfur dioxide

UTM Universal Trans verse Mercator VOC volatile organic compound

Public Comment / Affected States / EPA Review Summary

A 30-day public comment period for the J. R. Simplot Company – Don Siding Plant, draft Tier I operating permit will be held in accordance with IDAPA 58.01.01.364, *Rules for the Control of Air Pollution in Idaho*.

IDAPA 58.01.01.008.01 defines affected states as: "All states: whose air quality may be affected by the emissions of the Tier I source and that are contiguous to Idaho; or that are within 50 miles of the Tier I source."

A review of the site location information included in the permit application indicates that the facility is not located with 50 miles of a state border. The facility is located within 50 miles of the Fort Hall Indian Reservation, which meets the definition of an affected state per 40 CFR 71.2. Therefore, the Fort Hall Indian Reservation will be provided an opportunity to comment on the draft Tier I operating permit.

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.300, Rules for the Control of Air Pollution in Idaho, for issuing Tier I operating permits.

2. FACILITY DESCRIPTION

The facility is an integrated phosphate fertilizer manufacturing plant. The plant produces phosphoric acid, sulfuric acid, nitric acid, ammonia, several grades of solid and liquid fertilizers, and other commercial chemical products. A detailed process description can be found under each emissions unit group in the Tier I operating permit, as well as in the Tier I operating permit applications.

3. FACILITY / AREA CLASSIFICATION

J. R. Simplot Company, Don Plant (Simplot), is defined as a major facility because the facility emits or has the potential to emit PM₁₀, CO, NO_x, SO₂, and VOCs, each at over 100 T/yr. The facility is a designated facility as defined by IDAPA 58.01.01.006.27, and as such, is an existing PSD facility and subject to PSD permitting requirements. The SIC defining the facility is 2874, Phosphate Fertilizer Manufacturing, and the AIRS/AFS facility classification is A.

The facility is located within AQCR 061 and UTM zone 12. The facility is located in Power County which is designated as nonattainment for PM_{10} and unclassifiable for all other criteria pollutants (CO, NO_x , SO_2 , lead, and ozone).

4. APPLICATION SCOPE

Simplot has requested, in a letter received on June 14, 2004, that Tier I Operating Permit No. T1-9507-114-1 be modified to accommodate Exhibit A to the settlement agreement reached on the appeal of Tier I Operating Permit No. 077-00006, issued December 24, 2002. Permit Conditions 2.21, 14.6.1, 14.8, and 14.9 were modified. Also, General Provisions 21.3.2, 21.3.3, and 24 were updated.

4.1 Application Chronology

6/10/04	Settlement agreement signed
6/14/04	Administrative amendment request received
8/11/04	Request determined to be a request for a significant modification, and application determined complete.
8/20/04	Facility draft permit issued to the facility and to the DEQ Pocatello Regional Office
9/7/04	Comments received from facility

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this permit action.:

5.1 Emissions Inventory

This permit modification does not result in a change in emissions.

5.2 Modeling

No modeling is required for this permit action.

5.3 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this permit action.

The modifications were made to this permit according to Exhibit A of the settlement agreement signed on June 10, 2004. A copy of the settlement agreement is included as Appendix A of this statement of basis.

General Provisions 21.3.2 and 21.3.3 were updated to incorporate the applicable IDAPA rule changes which were made on February 5, 2004. The rule sections incorporated are IDAPA 58.01.01.322.11(c)(ii) and IDAPA 58.01.01.322.11(c)(iii), as follows:

"ii. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under Subsections 322.06, 322.07, and 322.08;

iii. The status of compliance with the terms and conditions of the Tier I operating permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Subsection 322.11.c.ii. above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;"

These rule changes were incorporated as follows:

General Provision 21.3.2 appears in the previous operating permit as follows:

"The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this Tier I operating permit. If necessary, the owner or operator shall identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the CAA which prohibits knowingly making a false certification or omitting material information;"

General Provision 21.3.2 appears in the current operating permit as follows:

"The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required by this Tier I operating permit."

General Provision 21.3.3 appears in the previous operating permit as follows:

"The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Paragraph 21.3.2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;"

General Provision 21.3.3 appears in the current operating permit as follows:

"The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Paragraph 21.3.2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;"

General Provision 24 was changed to clarify the required semi-annual reporting period.

General Provision 24 appears in the previous operating permit as follows:

"In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months starting six months from December 24, 2002. All instances of deviations from this operating permit's requirements must be clearly identified in the report. All required reports must be certified in accordance with IDAPA 58.01.01.123."

General Provision 24 appears in the current operating permit as follows:

"In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months. The permittee's semiannual reporting periods shall be from December 24 to June 23 and June 24 to December 23. All instances of deviations from this operating permit's requirements must be clearly identified in the report. All required reports must be certified in accordance with IDAPA 58.01.01.123."

This change was made to clarify the reporting period. This change is being made to operating permits as they are modified or renewed.

5.4 Fee Review

The J. R. Simplot Company, Don Plant, facility is a major facility as defined in IDAPA 58.01.01.008.10 and is therefore subject to registration and registration fees in accordance with IDAPA 58.01.01.387. The facility is current with its registration fees.

6. PERMIT CONDITIONS

This section summarizes and explains the reasoning behind the monitoring permit conditions in the Tier I Operating Permit.

Permit Condition 2.21 was changed to eliminate the references to fuels (coal and wood) that are not being used by the facility. This change is being made to existing permits as they are revised or renewed in order to eliminate extraneous requirements that do not apply to the facility.

Permit Conditions 14.6.1 and 14.8 were revised as shown in Appendix A. Appendix A is a copy of the settlement agreement described in Section 5.3 of this statement of basis. The settlement agreement contains a red-line strike-out version of the pages of the permit which shows the agreed-upon changes. Both Permit Conditions 14.6.1 and 14.8 require increased testing of the cooling tower cells. The changes to the Tier I Operating Permit No. T1-040313 that were made in this permit action are exactly as is shown in the red-line strike-out copy of the previous permit (No. T1-9507-114-1) which is a part of the settlement agreement.

On September 7, 2004, DEQ received comments from the facility for the draft permit that was issued. The modifications requested for Permit Condition 14.6.1 were in part to clarify how PM₁₀ emission compliance will be determined and the number of cooling tower cells to be tested during calendar year 2005. These changes were made as requested. Permit Condition 14.6.1 is as follows:

"The permittee shall conduct a compliance test within 12 months of, or 12 months prior to, December 24, 2002 to demonstrate compliance with the PM and PM $_{10}$ hourly emissions limits in Permit Conditions 14.1 and 14.2.

During calendar years 2003 and 2004, compliance with the PM_{10} emissions limit in Permit Condition 14.2 shall be determined by conducting a Method 5 compliance test on one of the cooling tower cells in each of the three reclaim cooling towers. During calendar year 2005, six cooling tower cells will be tested. The PM_{10} fraction of the PM emission rate determined during the test shall be determined by multiplying the PM emission rate by a 0.20 conversion factor.

During calendar years 2004, Method 5 and 202 tests shall be conducted on one of the cooling tower cells in each of the three reclaim cooling towers in addition to the Method 5 test. During calendar year 2005, six cooling cells will be tested. All compliance testing shall be conducted in accordance with Permit Condition 2.16.

No later than September 30, 2005, Simplot shall submit a permit application to revise the PM₁₀ emissions limits to reflect the results of the Method 5 and 202 tests. The permit application shall contain justification for each emission limit proposed. Once DEQ issues a permit with revised PM₁₀ emissions limits, compliance with Permit Condition 14.2 shall be determined by annual source testing using Methods 5 and 202 on two of the cooling tower cells in each of the three reclaim cooling towers. The annual source test shall be conducted as specified in Permit Condition 14.8."

Permit Condition 14.9, which requires monitoring of fluoride and particulates, was eliminated as shown in the red-line strike-out copy of the previous Tier I operating permit which was included in the settlement agreement. The condition required collection of data to be used to estimate fluoride and PM/PM_{10} emissions by mass balance. According to Simplot, the flow rates of the inlet and outlet of the cooling towers cannot be measured with sufficient accuracy to allow calculation of valid emissions estimations. At this time, no other acceptable method of emissions measurement or estimation have been identified.

In accordance with the June 10, 2004 settlement agreement, DEQ intends to continue to evaluate some form of additional or different periodic monitoring for the cooling towers, and plans to solicit Simplot's participation in this effort.

In summary, Permit Conditions 2.21, 14.6.1, 14.8, and 14.9 were modified. Also, General Provisions 21.3.2, 21.3.3, and 24 were updated. The rest of the permit remains unchanged.

7. PUBLIC COMMENT

A draft permit was issued to the facility on August 20, 2004. DEQ received comments from the facility for minor changes to Permit Condition 14.6.1. These changes were made as requested and are documented in Section 6 of this statement of basis.

A 30-day public comment period for the J. R. Simplot Company – Don Siding Plant, draft Tier I operating permit will be held from in accordance with IDAPA 58.01.01.364, *Rules for the Control of Air Pollution in Idaho*.

8. RECOMMENDATION

Based on review of application materials and all applicable state and federal rules and regulations, staff recommend that J. R. Simplot Company, Don Plant, be issued draft Tier I Operating Permit No. T1-040313 for the incorporation of Exhibit A of the June 10, 2004 settlement agreement. The project does not involve PSD requirements.

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APPENDIX A

June 10, 2004 Settlement Agreement